

U.S. State Parks Visitation Data from the NASPD Annual Information Exchange Project

Yu-Fai Leung, PhD

Jordan Smith, PhD

Anna Miller, MS

Department of Parks, Recreation and Tourism Management
North Carolina State University, USA



The National Association of State Park Directors

NASPD Annual Information Exchange Project

Project Partners



Department of Parks, Recreation and
Tourism Management



The National Association of State Park Directors

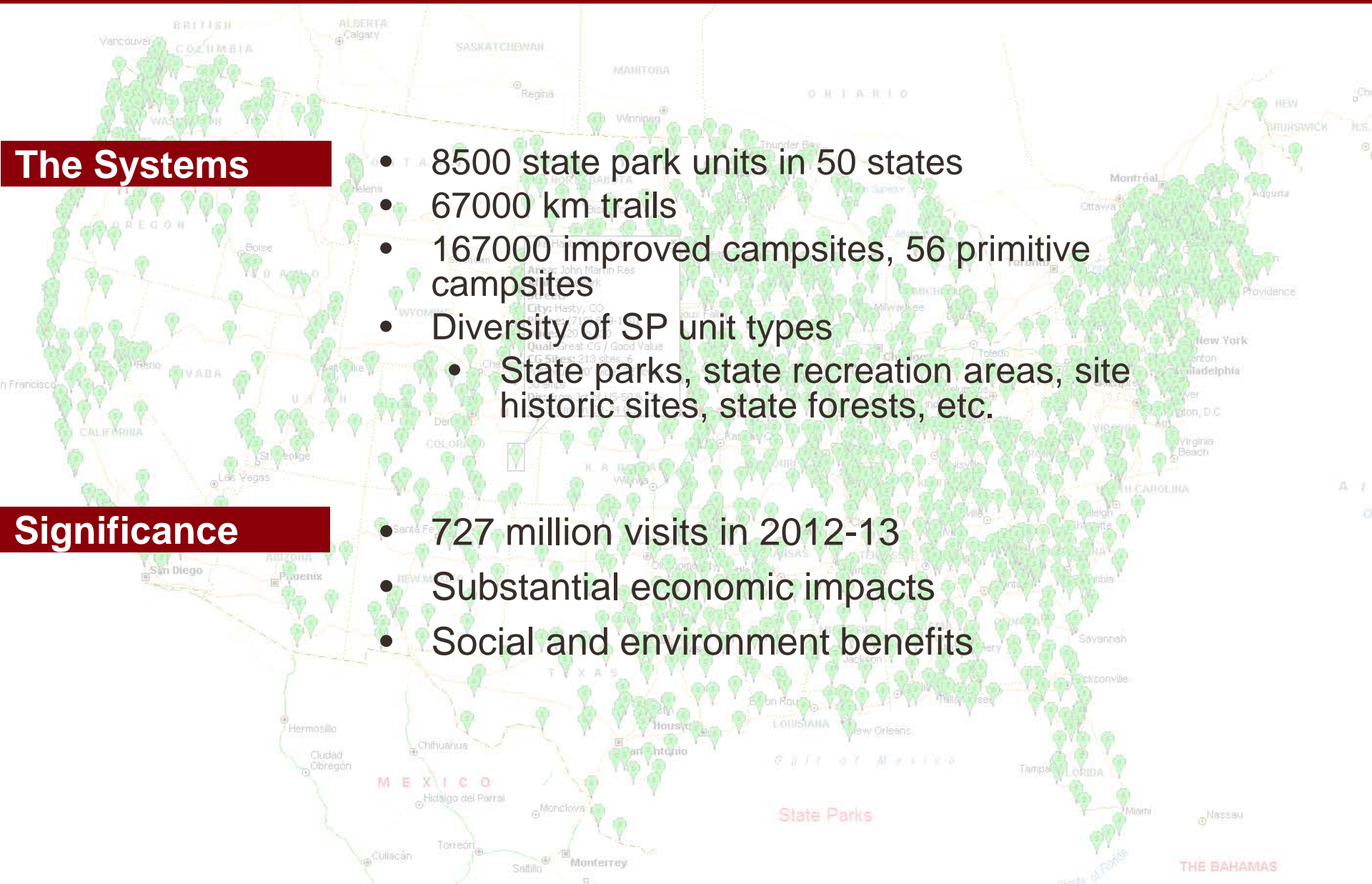
U.S. State Park Systems

The Systems

- 8500 state park units in 50 states
- 67000 km trails
- 167000 improved campsites, 56 primitive campsites
- Diversity of SP unit types
 - State parks, state recreation areas, site historic sites, state forests, etc.

Significance

- 727 million visits in 2012-13
- Substantial economic impacts
- Social and environment benefits



The Annual Information Exchange Project

A Brief History

- Started in 1979
- More systematic survey since 1992 with better definitions
- Indiana State/Indiana until 2006
- NCSU since 2006



The Annual Information Exchange Project

Implementation Structure

- NCSU Project Team
 - 1 PI, 1 co-PI, 1 project assistant
- NASPD Board
 - Executive Director
 - Communications Officer
- 50 State AIX Liaisons



The NASPD AIX Project

Types of Data

- Seven Data Entry “Tables”
- AIX Variables by Table

Table (Category)	Examples
<i>Inventory</i>	Total No. of Areas, Types of Park Units, Total Acreage, Trail Mileage
<i>Facilities</i>	No. of Campsites, Cabins, Group Facilities, Lodges, Restaurants, Golf Courses
<i>Attendance</i>	Day Use, Overnight Use (both fee and Non-fee areas), Facility Use
<i>Capital Expenditures</i>	Land Acquisition, Construction Costs, Source of Funds
<i>Operating Expenditures</i>	Source of Funds, Parks’ Share of State Expenditures, User Fees, Revenues
<i>Personnel and Salaries</i>	No. of Different Positions, Salaries,

The NASPD AIX Project


Data Entry

- FileMaker Database Management Software
- AIX Server at NCSU
- AIX Liaisons access via Project Website

NASPD-NCSU Annual Informat... X

research.cnr.ncsu.edu/ncsu/aix/

451 Charter Principles - Eu...

NC STATE UNIVERSITY  The National Association of State Park Directors

Annual Information Exchange

Statistical Report of State Park Operations (Data Reporting Period -- 7/1/2013-6/30/2014)

The National Association of State Park Directors (NASPD) Annual Information Exchange (AIX) survey, hosted by North Carolina State University, collects information on state park facilities, visitation, expenses, financing and personnel for all state park units in the USA. Please click the AIX Survey link below to access the survey. Your username and password are required for access. Thank you for your participation in this year's survey.

[Access the AIX Survey Here](#) (have your username and password ready) [Data Entry Deadline: November 14, 2014]

* **Important:** If you have persistent difficulty accessing the survey website, it may be due to a port accessibility issue in your computer network.

AIX Reports, Data and Further Analyses

- **AIX Reports and Data Sets**
 - AIX reports (PDF) and data sets (Excel) from the current and past years are available at no charge to all AIX liaisons. A modest charge depending on the user type. Please contact the Project PI, Dr. Yu-Fai Leung (leung@ncsu.edu) for more information.
 - The AIX 2012-13 Report (PDF document and accompanying Excel data) was delivered to all state liaisons on April 3, 2014. Thank you for your participation.
 - [Corrections on the AIX 2011-12 Report](#)

The 2007 National Association of State Park Directors Annual Information Exchange AIX Worksheet for the period 1 July 2005 through 30 June 2006

Table 1: Inventory

Arizona

	Total Areas in System		Total Operational Areas		Total Acreage round to nearest acre	
	2006 Report	2007 Report	2006 Report	2007 Report	2006 Report	2007 Report
State Parks	16	14	16	14	24,876	21,914
State Recreation Areas	0	1	0	1	0	686
Natural Areas	3	3	3	3	29,618	12,045
Historical Areas	9	9	9	9	4,545	4,544
Environmental Education Areas	3	3	3	3	4,584	4,584
Scientific Areas	0	0	0	0	0	0
State Forests	0	0	0	0	0	0
Fish & Wildlife Areas	0	0	0	0	0	0
Other & Miscellaneous Areas	0	2	0	2	0	19,811
Total (number & acres)	31	32	31	32	63,623	63,584
	Total in System		Total Operational		Total Miles	
	2006 Report	2007 Report	2006 Report	2007 Report	2006 Report	2007 Report
Total Trails (number & miles)	63	63	63	63	63	63

The data reported on this page should be compared with your 2006 report data. If you note specific differences please tell us why. On the web site space is provided at the conclusion of each table to explain. If you respond using this form use the space provided below. **Notes:** Other and Miscellaneous Areas: Conservation Easement

The NASPD AIX Project: Steps

Data Quality Assurance

Data Input Instructions

Initial Data Error Checks

Data Review Period

Final Data Checks

NASPD Review



National Association of State Park Directors

Annual Information Exchange

Report of State Park Operations for the Period

July 1, 2012 through June 30, 2013

Data Entry Deadline: Monday, November 18, 2013

SCHEDULE

9/16/2013	AIX survey website available for data input
11/18/2013	Data entry deadline
12/9/2013	Draft of AIX Report to NASPD/states for review/corrections
1/15/2014	NASPD feedback and state response deadline
2/1/2014	Final Report to NASPD
2/15/2014	Print and PDF reports ready for distribution
3/1/2014	Subsequent updates to be published via PDF on AIX website

DATA ENTRY INSTRUCTIONS

- AIX survey website access through the following URL:

<http://cnr.ncsu.edu/rern/aix/>

- Login

Enter username and password

- Username is the name of your state (no spaces).
Username is not case sensitive.
- Password is the same as your state, no spaces, in lower case.
Password is case sensitive.

The NASPD AIX Project

Project Outputs



National Association of State Park Directors

Statistical Report of State Park Operations: 2012-2013

*Annual Information Exchange
for the Period July 1, 2012 through June 30, 2013*

Prepared for the National Association of State Park Directors by

AIX-Project Team
Yu-Fai Leung, Ph.D., Principal Investigator
Jordan Smith, Ph.D., Co-Principal Investigator
Anna Miller, Project Assistant
Christopher Serenani, Project Assistant

Department of Parks, Recreation and Tourism Management
North Carolina State University
Raleigh, NC 27695

*Published under the direction of
The National Association of State Park Directors
PO Box 91567
Raleigh, NC 27675-1567
919.218.9222*

**April 2014
Volume 35**

2014 OUTLOOK AND ANALYSIS LETTER

a report prepared for the

National Association of State Park Directors

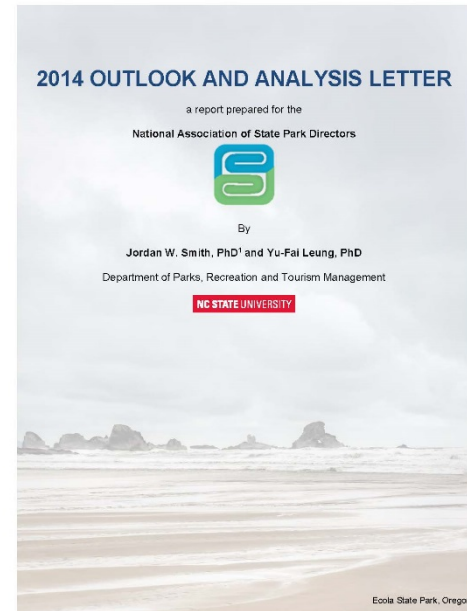


By

Jordan W. Smith, PhD¹ and Yu-Fai Leung, PhD

Department of Parks, Recreation and Tourism Management

NC STATE UNIVERSITY



Ecola State Park, Oregon

¹ Address all correspondence to jwsmith12@ncsu.edu

The NASPD AIX Project

Some Examples

2012-2013 Annual Information Exchange Report

Table 3A: Visitation and Use - Attendance
(page 1 of 7)

This table contains three subsections: Table 3A-1, Table 3A-2, Table 3A-3. State park reports separately for "day" use, "overnight" use, and by "day" area and "overnight" area.

STATE	Day	Overnight	Total	Day
Alabama	5,192,750	110,511	5,303,261	1,000,000
Alaska	1,780,880	25,112	1,805,992	2,219,354
Arizona	1,571,175	337,595	1,908,770	6,865
Arkansas	-	-	-	7,150,700
California	19,125,500	6,394,022	25,519,522	4,488,815
Colorado	3,402,237	2,739,285	6,141,522	5,599,006
Connecticut	2,795,446	799,074	3,594,520	-
Delaware	3,654,855	205,802	3,860,657	1,311,587
Florida	10,020,162	2,655,039	12,675,201	5,169,509
Georgia	7,769,355	1,355,145	9,124,500	-
Hawaii	13,115,100	-	13,115,100	11,130,000
Idaho	4,932,365	223,355	5,155,720	380,110
Illinois	12,876,456	3,215,514	16,091,970	15,117,000
Indiana	3,240,542	1,515,242	4,755,784	5,027,355
Iowa	1,158,191	5,715,115	6,873,306	440,625
Kansas	1,044,404	24,257	1,068,661	-
Kentucky	7,181,185	81,820	7,263,005	2,946,401
Louisiana	19,944,855	4,812,349	24,757,204	20,950,500

2012-2013 Annual Information Exchange Report

Table 3A: Visitation and Use - Attendance
(page 2 of 7)

STATE	Day	Overnight	Total
Michigan	1,158,191	5,715,115	6,873,306
Minnesota	1,044,404	24,257	1,068,661
Mississippi	7,181,185	81,820	7,263,005
Missouri	19,944,855	4,812,349	24,757,204
Montana	3,240,542	1,515,242	4,755,784
Nebraska	1,158,191	5,715,115	6,873,306
Nevada	1,044,404	24,257	1,068,661
New Hampshire	7,181,185	81,820	7,263,005
New Jersey	19,944,855	4,812,349	24,757,204
New Mexico	3,240,542	1,515,242	4,755,784
New York	1,158,191	5,715,115	6,873,306
North Carolina	1,044,404	24,257	1,068,661
North Dakota	7,181,185	81,820	7,263,005
Ohio	19,944,855	4,812,349	24,757,204
Oklahoma	3,240,542	1,515,242	4,755,784
Oregon	1,158,191	5,715,115	6,873,306
Pennsylvania	1,044,404	24,257	1,068,661
Rhode Island	7,181,185	81,820	7,263,005
South Carolina	19,944,855	4,812,349	24,757,204
South Dakota	3,240,542	1,515,242	4,755,784
Tennessee	1,158,191	5,715,115	6,873,306
Texas	1,044,404	24,257	1,068,661
Utah	7,181,185	81,820	7,263,005
Vermont	19,944,855	4,812,349	24,757,204
Virginia	3,240,542	1,515,242	4,755,784
Washington	1,158,191	5,715,115	6,873,306
West Virginia	1,044,404	24,257	1,068,661
Wisconsin	7,181,185	81,820	7,263,005
Wyoming	19,944,855	4,812,349	24,757,204
Total	662,857,129	64,588,853	727,445,982

2012-2013 Annual Information Exchange Report

Table 3A: Visitation and Use - Attendance
(page 2 of 7)

STATE	Day	Overnight	Total
Alabama	3,254,835	976,511	4,231,346
Alaska	3,950,144	693,750	4,643,894
Arizona	1,577,108	597,558	2,174,666
Arkansas	7,120,700	687,339	7,808,039
California	64,024,144	6,394,022	70,418,166
Colorado	3,362,237	2,139,283	5,501,520
Connecticut	7,349,502	283,243	7,632,745
Delaware	4,838,055	230,802	5,068,857
Florida	23,178,711	2,397,083	25,575,794
Georgia	7,780,388	1,225,745	8,996,133
Hawaii	12,916,876	58,564	12,975,440
Idaho	4,838,263	220,338	5,058,601
Illinois	40,058,032	744,692	40,802,724
Indiana	12,997,568	3,018,514	16,016,082
Iowa	15,187,409	754,563	15,941,972
Kansas	3,240,242	3,510,282	6,750,524
Kentucky	5,902,385	870,458	6,772,843
Louisiana	1,159,191	827,813	1,987,004
Maine	2,291,280	247,387	2,538,667
Maryland	9,311,186	787,692	10,098,878
Massachusetts	29,358,809	623,896	29,982,705
Michigan	19,944,888	4,692,349	24,637,237
Minnesota	7,429,313	835,319	8,264,632
Mississippi	354,364	544,887	899,251
Missouri	15,553,350	1,455,637	17,008,987
Montana	1,783,118	260,275	2,043,393
Nebraska	11,421,971	544,603	11,966,574
Nevada	2,838,321	198,703	3,037,024
New Hampshire	951,991	191,848	1,143,839
New Jersey	13,872,255	325,208	14,197,463
New Mexico	1,406,021	2,448,090	3,854,111
New York	50,115,204	3,467,781	53,582,985
North Carolina	13,349,102	412,848	13,761,950
North Dakota	868,868	249,415	1,118,283
Ohio	49,207,923	2,547,041	51,754,964
Oklahoma	6,841,712	1,223,972	8,065,684
Oregon	42,120,429	2,455,668	44,576,097
Pennsylvania	38,256,745	1,571,690	39,828,435
Rhode Island	5,883,203	97,271	5,980,474
South Carolina	5,558,782	1,675,128	7,233,910
South Dakota	7,188,508	805,429	7,993,937
Tennessee	26,602,199	1,278,860	27,881,059
Texas	4,357,017	3,768,921	8,125,938
Utah	2,759,121	777,583	3,536,704
Vermont	471,258	962,637	1,433,895
Virginia	8,833,077	869,311	9,702,388
Washington	33,369,838	2,255,172	35,625,010
West Virginia	6,885,312	714,898	7,600,210
Wisconsin	14,429,796	548,845	14,978,641
Wyoming	2,941,853	544,897	3,486,750
Total	662,857,129	64,588,853	727,445,982

19

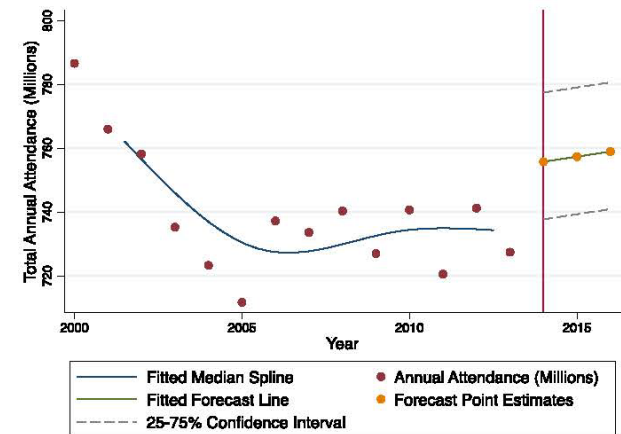


Figure 2. Forecasted annual attendance for the 50 state park systems.

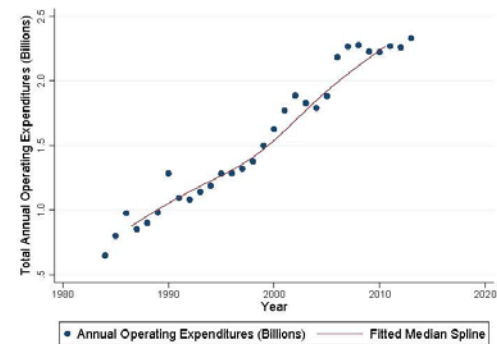


Figure 3. Total annual operating expenditures for the 50 state park systems.

The NASPD AIX Project

Supporting Other Statistical Reports

Outdoor Recreation for 21st Century America

A Report to the National
Statistical Survey on Recreation
and the Environment



H. Ken Cordell
Principal Author

Outdoor Recreation in American Life:

A National
Assessment
of Demand
and Supply
Trends

H. Ken Cordell
Principal Investigator

January 2009

Parks and Recreation in the United States

State Park Systems

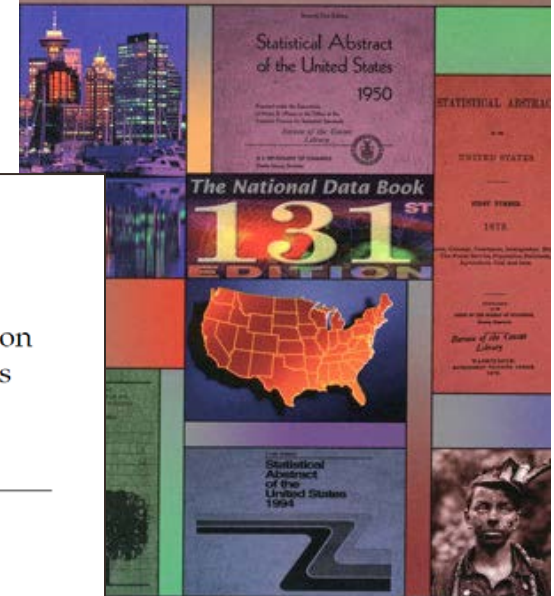
Margaret Walls

1010 P St. NW
Washington, DC 20036
202-328-5000 www.nrt.org

BACKGROUND



Statistical Abstract of the United States: 2012



United States
Bureau

U.S. Department of Commerce
Economics and Statistics Administration
U.S. Census Bureau

The NASPD AIX Project

Scholarly Publications:
Trends Analysis

Journal of Environmental Management 99 (2012) 18–26

Journal of Environmental Management

journal homepage: www.elsevier.com/locate/jenvman

A nationwide production analysis of state park attendance in the United States

Christos Siderelis^{a,*}, Roger L. Moore^a, Yu-Fai Leung^a, Jordan W. Smith^b^aDepartment of Parks, Recreation and Tourism Management, North Carolina State University, USA
^bDepartment of Forestry and Natural Resources, Purdue University, USA

ARTICLE INFO

Article history:
Received 3 February 2011
Received in revised form
18 August 2011
Accepted 7 January 2012
Available onlineKeywords:
Outdoor recreation
Production
State parks
Recreation economics
Recreation planning

ABSTRACT

This study examined the production of U.S. state park visits from 1984 to 2010 by state. In specifying the production equation in terms of the influences of the state's parklands, labor, and capital investments on the annual attendance, we found that state governments will experience an ongoing need for investment due to maintain their parklands if attendance is to increase in the future. Results also indicated that more capital expenditures are not likely to increase park utilization rates. Post-estimation procedures involved the application of the response residuals to identify the capacity utilization rate of the state's park systems over the past 27 years. Post-estimation results revealed operators not or needed capacity utilization expectations from 1984 through 1986. However, beginning in 1986, the annual mean utilization rate for the nation's supply of state parks signaled a trend toward excess capacity. Our forecast revealed the mean utilization over the next three years will vary between 90% and 95%. Post-estimation procedures also examined the relationship between state park management orientations (toward either public lands preservation or recreational development) and projected annual capacity utilization rates. Results indicate that the quantity of added facilities to broaden their appeal to the public (i.e., a recreation orientation) was not important in explaining utilization capacities. However, as a recreation base and public lands preservation related significantly to greater utilization rates. In our view, the public will continue to accept current and new services for continued operations of the state parks on the compelling need for access to outdoor recreation to contribute to the visitor well-being.

© 2012 Elsevier Ltd. All rights reserved.

1. Introduction

This study focuses on state park systems in the United States. The state's parks are pivotal in the national effort to supply adequate outdoor recreation opportunities through their provision and administration of parklands (Landrum, 2004). The state's parks have evolved from their traditional purposes of acquiring scenic tracts of lands and opening them to public access for outdoor recreation with the primary aim of protecting natural resources and providing outdoor recreation opportunities to also providing restrooms, picnic tables, campsites, and other facilities. When we speak of providing outdoor recreation opportunities, we mean simply the consumer's access to a state park where the consumer may engage in various outdoor activities. In fact, any person can be a park consumer if that person pays all the necessary charges. If any, for park access and consumes the services. By performing their traditional roles of protecting natural resources and providing outdoor recreation opportunities, state parks contribute to public

well-being by offering accessible opportunities that contribute to recreationists' physical health and mental well-being (Waltz et al., 2009). During FY 2010, state parks attracted 717 million combined visits by residents and non-residents. Despite the importance of the state's parks to the national supply of outdoor recreation opportunities, there are few published longitudinal studies about levels of consumption in terms of their production capabilities. Strawn's (1975) study of the production of recreation visits and average operating costs of the Pennsylvania park system is one. We are unaware of published research efforts that have attempted to examine the production processes and the capacity utilizations of the 50 state's park systems with cross-sectional and longitudinal data or efforts that have applied aspects of management orientations to the consumption of services from the state's systems. Consumption refers to the quantity of annual attendance at a specific level of recreation supply and price.

1.1. Problem

Annual attendance is the technical measure of the quantity of visits to the state's parks at a visiting period. We view a visit as consisting of a consumer with utility (U, Y) where U is the single output

STATE PARKS

Trends in State Park Operations

By Daniel D. McLean and Traci Hogan

State park agencies have experienced significant growth during the last decade and made progress in personnel, funding and operations. The economy had an early positive impact on state parks during the mid to late parts of the last decade. Recent reductions in state revenues have begun to erode the progress made during the 1990s. State parks are challenged by reduced funding levels, decreases in visitation, and reduction in full-time staff. Entrepreneurship, external funding sources, and increased state park revenue generation are ongoing trends for state parks.

State park operations exist in various forms and structure across the United States. State parks predate national parks and are seen as a close to leisure recreation resource. State parks recorded more annual visits than the National Park Service and U.S. Forest Service combined. State parks represent less than 10 percent of combined state and federal park and recreation acreage and yet record almost 50 percent of all visits. As an outdoor recreation resource state parks are clearly important to Americans. During the 1990s and early parts of this decade, state parks and state government have seen dramatic shifts in funding, tax collection and revenue generation. The mid to late 1990s were characterized as a period of unparalleled economic growth while the early part of this decade resulted in some of the largest declines in state operating budgets and deficits since the 1930s.

Mission of State Parks

State parks were originally conceived in the latter-half of the 19th century and confirmed and structured in the early part of the 20th century. The National Conference on State Parks, organized in the early 1920s brought together the diversity of systems and provided common threads for state park administrators to work towards. In more recent years the diversity of the state park systems have found less commonality and more diversity, but as N.C. Landrum suggests, "state parks could serve as close-to-home substitutes for the national parks and provide a complementary alternative to the city parks. Filling that void between the outdoor recreational offerings of the national parks and those of the city parks thus became a major goal, and it is still valid—probably the most valid—purpose that state parks can serve today."

Methodology

Data for this report were collected from the National Association of State Park Directors (NASPD)

Annual Information Exchange (AIX) for fiscal year (FY) 1994 through 2003. In most cases the entire 10-year period was used for data comparisons. In some few instances data is compared for the start point (FY1994), mid-point (FY1998) and end-point (FY2003).

The AIX is an annual report collected by NASPD and provided to its members. The report was first conceived in the 1970s and is the primary source of state park data available to state park directors and researchers. The AIX gathers data from seven areas including inventory of areas and acreage, types of facilities, visitation and use, capital improvements, financing, personnel and support groups.

The State Park Estate

In FY 2003 state park agencies managed 13,571,028 acres, an increase of 1.8 million acres since 1994 (Table A). Alaska makes the largest contribution to the state park system at 3.4 million acres. Without Alaska included in the total the state park system is a much more modest 10.2 million acres. State parks are not evenly distributed across the United States. The Western region has a proportionally larger portion of the acreage, and the Northeast ranks second in the acreage.

State park systems manage multiple types of areas. The AIX identifies nine such types of areas including state parks, recreation areas, natural areas, historic areas, environmental education areas, scientific areas, forests, fish and wildlife areas, and other areas. Within states the designations may vary and frequently are determined by legislatures and areas may be moved among agencies within the state. State park agencies managed 5,842 areas in FY 2003, up from 5,334 in FY 1994. The number of state park managed areas has grown slowly and is representative of a stable, mature system. Most states have had state park systems for sufficient length of time to recognize their importance to the state.

State Park Information Resources Center
State Park Research Report 99-1
Department of Recreation & Park Administration, Indiana UniversityAn 8-Year Analysis of
State Park Fiscal TrendsDaniel D. McLean, Ph.D.¹, Deborah Chavez, Ph.D.², & Julie S. Krapp³

This research was funded, in part, through a cooperative agreement with the Pacific Southwest Forest Research Station.

Abstract: The National Association of State Park Directors (NASPD) has gathered data about state parks for 20 years. Consistent data has been available since 1992. Of particular interest is data relating to fiscal issues. This study looked at income sources, earned income, operational expenditures, state park budgets as a percent of the total state budget, and a comparative analysis of data. The data found that in every instance, except earned income, state park agencies minimally kept pace with inflation. State park agencies have more dollars to spend on operations in 1999 than in 1992. In 1992 state parks had available an average of \$98 per acre. By 1999 that had shrunk to \$92 per acre (using 1992 dollars). Earned income can be viewed from different perspectives in relation to its importance to state park agencies. The utilization of earned income has increased steadily, but at the expense of compulsory income (tax dollars). Earned income is replacing some levels compulsory income so that total income available for operations is not increasing at the same rate. The number of full-time employee has decreased over the reporting period.

Introduction

America's state parks are a unique resource providing close to home outdoor recreation opportunities. The presence of these parks in America's urban and rural areas is a significant natural, historical and cultural resource that adds to the base of recreation and leisure opportunities. In many ways the 50 state park systems are both unique and common. Common in the sense that many state park resources seem to recur throughout the United States—the presence of large open spaces for play, recreation, and relaxation—and unique in

ways that only a few sites in each state can represent, such as South Dakota's Custer State Park, New York's Niagara Reservation State Park, or Kentucky's Natural Bridge State Resort Park.

The National Association of State Park Directors (NASPD) is composed of the 50 state park directors in the United States. They meet on an annual basis to discuss common issues and are additionally linked through an executive director and several electronic communications methods.

FISCAL TRENDS IN AMERICA'S STATE PARKS

1

* Correspondence author: Department of Parks, Recreation and Tourism Management, North Carolina State University, 4008 Strickland Hall, Box 8008, Raleigh, NC 27697-8008, USA. Tel.: +1 919 515 1790; fax: +1 919 515 3687. E-mail address: chris.siderelis@ncsu.edu (C. Siderelis).

0924-6460/\$ – see front matter © 2012 Elsevier Ltd. All rights reserved.
doi:10.1016/j.jenvman.2012.01.016

The NASPD AIX Project

Scholarly Publications:
Comparative Analysis

American Journal of Environmental Sciences 5 (2): 187-196, 2009
ISSN 1553-345X
© 2009 Science Publications

Management Policy in and Typology of State Park Systems

¹Lowell Caneday, ¹Debra Jordan and ²Yating Liang
¹Leisure Studies, Oklahoma State University, 180 Colvin Center, Stillwater, OK 74078
²Department of Health, Physical Education and Recreation
Missouri State University, 901 S. National Avenue, Springfield, MO 65897

Abstract: Problem statement: Parks, with particular emphasis on national and state parks, host varied interactions between human and natural systems. In particular, state park systems manage important resources related to quality of life and also are mainstays in tourism, economic development and preservation of heritage and conservation of ecosystems. Management of these parks and the human activity occurring in them is an integral component of environmental science. **Approach:** This research focused on identifying the legal mandates, management policies and practices that define park operations in various states within the United States. This research was a precursor to benchmarking state park systems, essential to identifying similar and dissimilar systems for the purpose of identifying benchmarking partners. Utilizing the annual information exchange of the National Association of State Park Directors, the researchers conducted a K-means cluster analysis of state park systems across the United States. **Results:** A seven-cluster solution was found to be the best description of the fifty state park systems. Twenty five of thirty characteristics were identified as being significant factors in defining clusters of state parks. These significant factors included: (1) number of properties, (2) number of designated state parks, (3) number of recreation areas, (4) number of environmental areas, (5) number of scientific areas, (6) number of forests, (7) number of trails and (8) miles of trails. Interestingly, mission statements and types of oversight governmental agency were not defining factors in determining clusters of state parks. **Conclusion/Recommendations:** This cluster analysis of state parks is important as a foundation for benchmarking state park systems, permitting comparison with similar and dissimilar systems. It is also important for consideration of marketing state parks to visitors who desire particular experiences in specific environments. This analysis provided a better understanding of interactions between human activity and natural systems, offering management insight for improved practices.

Key words: State parks, benchmarking, park management, cluster analysis

INTRODUCTION

In contemporary American society we wrestle with the concept of park. A precise definition is unlikely given the great variety of properties and locations with that designation. Over time a park has meant a hunting reserve, a garden, a neighborhood playground, or a stadium^[1]. For the purpose of this article, parks are defined as tracts of tax-supported land and water, established primarily for the benefit and enjoyment of the public and maintained essentially for outdoor recreation activities^[10]. Parks come in all shapes and sizes and are classified in a variety of ways. In some situations, designations for parks, such as national park and state park, indicate the governmental level administering the area. In most cases, national and state parks include legal mandates and management policies

that address the natural environment. As a result, most parks, with particular emphasis on national and state parks, become host sites for varied interactions between human and natural systems. Further, these state park systems manage important resources related to quality of life and also are mainstays in tourism, economic development, preservation of heritage and conservation of ecosystems. As such, management of these parks and the human activity occurring in them is an integral component of environmental science.

This research focused on identifying the legal mandates, management policies and practices that define park operations in various states within the United States. Several states have attempted to benchmark their state park system utilizing comparisons with other state park systems. To conduct such benchmarking from an informed basis, it is

Corresponding Author: Lowell Caneday, Leisure Studies, Oklahoma State University, 180 Colvin Center, Stillwater, OK 74078
187

STEVEN M. DAVIS*

Preservation, Resource Extraction, and Recreation on Public Lands: A View from the States**

ABSTRACT

Compared to federal land management, there is a dearth of research and overarching data on state public land holdings, despite their prominence. By providing a comprehensive profile of state public land holdings, this study will attempt to describe the diversity between and within state public land systems as well as identify patterns in state land management as a whole. Additionally, this research attempts to draw some tentative conclusions about how each state's portfolio of public land is oriented toward preservation, resource extraction, and recreation and how these three emphases are weighted and prioritized by each state.

I. INTRODUCTION

The roughly two-thirds of a billion acres of federal land and the agencies that manage this land have been the subject of some fairly intense scrutiny. In fact, the U.S. Forest Service and, to a lesser extent, the National Park Service, are among the most studied agencies in the entire federal bureaucracy.¹ Likewise, federal forest, energy, grazing, wildlife,

* Professor of Political Science, Social Science Department, Edgewood College, 1000 Edgewood College Dr., Madison, WI 53711, davis@edgewood.edu. The author wishes to thank his research assistants Danielle Wilson and Ben Rickelman for their help with this project.

** This title is a nod to political scientist Daniel Elazar's seminal work AMERICAN FEDERALISM: A VIEW FROM THE STATES (1966).

1. For just a very small sample of such scholarship, see JEANNE NIENABER CLARKE & DANIEL C. MCCOOL, STAKING OUT THE TERRAIN: POWER AND PERFORMANCE AMONG NATURAL RESOURCE AGENCIES (2d ed. 1996); PAUL J. CULHANE, PUBLIC LAND POLITICS: INTEREST GROUP INFLUENCE ON THE FOREST SERVICE AND THE BUREAU OF LAND MANAGEMENT (1981); WILLIAM C. EVERHART, THE NATIONAL PARK SERVICE (1972); RONALD A. FORESTA, AMERICA'S NATIONAL PARKS AND THEIR KEEPERS (1984); JOHN C. FREEMUTH, ISLANDS UNDER SIEGE: NATIONAL PARKS AND THE POLITICS OF EXTERNAL THREATS (1991); MICHAEL FROME, THE FOREST SERVICE (1971); SAMUEL P. HAYES, CONSERVATION AND THE GOSPEL OF EFFICIENCY: THE PROGRESSIVE CONSERVATION MOVEMENT, 1890-1920 (1959); HERBERT KAUFMAN, THE FOREST RANGER: A STUDY IN ADMINISTRATIVE BEHAVIOR (1960); RANDAL O. TOOLE, REFORMING THE FOREST SERVICE (1988); RICHARD WEST SELLARS, PRESERVING NATURE IN THE NATIONAL PARKS: A HISTORY (1997); TOURISM AND NATIONAL PARKS: ISSUES AND IMPLICATIONS (Richard W. Butler & Stephen W. Boyd eds., 2000); A VISION FOR THE U.S. FOREST SERVICE: GOALS FOR ITS NEXT CENTURY (Roger A. Sedjo ed., 2000); Harmony A. Mappes, *National Parks: For Use and*

The NASPD AIX Project

Lessons Learned

- Institutional support
- Refined Instructions (diversity of park systems)
- Personnel change
- Data quality assurance
- Communication of product outputs

Current Development

- New Filemaker version
- Integration with other databases



The NASPD AIX Project

Project URL: <http://research.cnr.ncsu.edu/rern/aix/>

Questions & Comments